**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**C++ Learning Goals Scale**

|  |  |  |  |
| --- | --- | --- | --- |
| **Topic: Learning algorithmic thinking with C++** | | | |
| **Learning Goals: Students will be able to think algorithmically. Students will be able to analyze code and explain it. Students will be able to use algorithms to create programs in C++ that use standard programming techniques and structures.** | | | |
| **Computer Science** | | | |
| **Score 4.0** | **The student develops advanced algorithms of his/her own and uses existing algorithms to produce professional looking programs that work correctly and are better than the benchmark. The projects are completely documented with superior comments for focus area code. The student answers questions about code and concepts with an accuracy of 90% or higher. The student is able to do projects independently.** | | **Date** |
|  |
|  | **3.5** | Student needs minimal assistance to do the projects. |  |
| **Score 3.0** | **The student develops algorithms of his/her own and uses existing algorithms to produce good looking programs that work and are as good as the benchmark. The programs are documented with comments for most focus area code. The student answers questions about code and concepts with an accuracy of 80% or higher. The student is able to do projects with some assistance.** | |  |
|  | **2.5** | The student needs quite a bit of assistance to do the projects. |  |
| **Score 2.0** | **The student needs help to develop algorithms or does not use any algorithms other than the provided ones. The student produces acceptable looking programs that mostly work but may have some flaws. Significant help was necessary to make the programs as good as the benchmarks, or are below the level of the benchmarks. The programs are missing documentation for focus area code, or the program crashes based on minor errors. The student answers questions about code and concepts with an accuracy of 70% or higher.** | |  |
|  | **1.5** | The student needs excessive amounts of assistance to produce an adequate project. |  |
| **Score 1.0** | **The student needs significant help to use provided algorithms. The student produces incomplete programs or ones that are below the level of the benchmark. Programs have many flaws, don’t compile or crash based on major errors. The programs are missing comments for focus area code or the student only added comments after repeatedly directed to do so. The student answers questions about code and concepts with an accuracy of 60% or higher.** | |
|  | **0.5** | With excessive help the students produces an incomplete and inadequate project. |
| **Score 0.0** | **Even with help, no understanding or skill demonstrated.** | |

Where are you on this scale?